

B. AMENDMENTS TO THE CLAIMS

Claims 1 and 2 have been cancelled.

3. (Previously presented) The process of Claim 25 wherein the mixture further includes a micropore forming agent.

4. (Previously presented) The process of Claim 3 wherein said micropore forming agent is a quaternary ammonium cation.

5. (Original) The process of Claim 3 wherein the inorganic oxide is an amorphous silicate.

Cancelled
by EA

6. (Previously presented) The process of Claim 2 wherein said compound is a glycol.

Amended by EA

7. (Previously presented) The process of Claim ²⁵~~6~~ wherein the glycol has a boiling point of at least 150°C.

8. (Previously presented) The process of Claim 5 wherein the heating includes maintaining the mixture at about the boiling point of water to evaporate water and volatile organics from the inorganic oxide, followed by calcining at a temperature of above 300°C.

9. (Previously presented) The process of Claim 25 wherein the inorganic oxide is a silicate material selected from the group consisting of tetraethyl orthosilicate, fumed silica, sodium silicate and silica sol.

10. (Original) The process of Claim 7 wherein the glycol is selected from the group consisting of glycerol, diethylene glycol, triethylene glycol and tetraethylene glycol.

11. (Previously presented) The process of Claim 10 wherein the mixture additionally contains a source of ions selected from the group consisting of IVA, VB, VIB, VIIB, VIII, IB, IIB and IIIA elements.

12. (Original) The process of Claim 10 wherein the mixture additionally contains a source of aluminium ions.

13. (Previously presented) The process of Claim 25 wherein the inorganic oxide comprises alumina.

14. Cancelled.

15. (Previously presented) The process of Claim 25 wherein the average particle size of the zeolite is from 5 to 1500 nanometers.

16. Cancelled.

17. (Previously presented) The product of Claim 27 wherein the BET surface area is from 50 to 1250 m²/g.

18. (Previously presented) The product of Claim 27 wherein the combined micro- and mesopore volume is from 0.3 to 2.2 ml/g.

19. (Previously presented) The product of Claim 27 wherein the pore size distribution of the mesopores produces a pore size distribution plot in which the ratio of the width of the plot at half the height of the plot to the pore size at the maximum height of the plot is no greater than 0.75.

20. (Previously presented) The product of Claim 27 wherein a pore size distribution plot of mesopores and micropores includes distinct mesopore and micropore peaks.

Claims 21-24 have been cancelled.

25. (Currently amended) A process for producing an inorganic oxide that contains micro- and mesopores, comprising:

heating a mixture comprising water, an inorganic oxide, a crystalline zeolite in finely divided form, and at least one compound that binds to the inorganic oxide by hydrogen bonding, said compound being selected from the group consisting of triethanolamine, sulfolane, tetraethylpentamine, diethylglycoldibenzoate, and a glycol, said heating being to a temperature and for a time to produce an inorganic oxide that contains both micropores and mesopores.

26. (Previously presented) The process of Claim 25 wherein said compound is triethanolamine.

27. (Currently amended) A product comprising:

an inorganic oxide and zeolite beta, said product including mesopores and micropores, said micropores being present in an amount of from 3% to 60%, by pore volume, based on micropores and mesopores, said mesopores having been generated by an organic pore-forming agent selected from the group consisting of triethanolamine, sulfolane, tetraethylpentamine, diethylglycoldibenzoate, and a glycol.

28. (Currently amended) A process for producing an inorganic oxide that contains mesopores and a substantial amount of micropores, comprising:

heating a mixture comprising water, an inorganic oxide, a crystalline zeolite, and at least one compound that binds to the inorganic oxide by hydrogen bonding, said compound being selected from the group consisting of triethanolamine, sulfolane, tetraethylpentamine, diethylglycoldibenzoate and a glycol, said heating being to a temperature below the temperature at which there is substantial formation of mesopores, and removing said at least one compound at a temperature below the

temperature at which there is substantial formation of mesopores to produce an inorganic oxide that contains mesopores and a substantial amount of micropores.

29. (Previously presented) The process of Claim 28 wherein said zeolite is zeolite beta.
30. (Previously presented) The process of Claim 28 wherein the mixture additionally contains a source of ions selected from the group consisting of IVA, VB, VIB, VIIB, VIII, IB, IIB, and IIIA elements.
31. (Previously presented) The process of Claim 28 wherein the mixture additionally contains a source of aluminum ions.
32. (Previously presented) The product of Claim 27 wherein the inorganic oxide comprises alumina.
33. (Previously presented) The process of Claim 28 wherein the inorganic oxide comprises alumina.
34. (Previously presented) The product of Claim 27 wherein the average particle size of the zeolite beta is from 5 to 1500 nanometers.
35. (Previously presented) The process of Claim 28 wherein the average particle size of the zeolite is from 5 to 1500 nanometers.